Claim Listing   This listing of claims will replace all prior versions and listings of

claims in the application:

1 - 63:   (cancelled)

64. (currently amended) ~~The expression vector of~~

~~Claim 53,~~ An expression vector optimized for use in

bacterial cells comprising a first nucleic acid sequence

encoding a peptide extension, wherein the encoded peptide

extension is selected from the group consisting of: Peptide

T7C (SEQ ID NO: 5), Peptide T7B (SEQ ID NO: 6), Peptide

T7B1 (SEQ ID NO: 7), Peptide T7B2 (SEQ ID NO: 8), Peptide

T7B3 (SEQ ID NO: 9), Peptide T7B5 (SEQ ID NO: 11), Peptide

T7B6 (SEQ ID NO: 12), Peptide T7B7 (SEQ ID NO: 13), Peptide

T7B8 (SEQ ID NO: 14), Peptide T7B9 (SEQ ID NO: 15), Peptide

T7B10 (SEQ ID NO: 16), Peptide T7B11 (SEQ ID NO: 17),

Peptide T7B12 (SEQ ID NO: 18), Peptide T7B13 (SEQ ID NO:

19), Peptide T7A1 (SEQ ID NO: 21), Peptide T7A2 (SEQ ID NO:

22), Peptide T7A3 (SEQ ID NO: 23), Peptide T7A4 (SEQ ID NO:

24) and Peptide T7A5 (SEQ ID NO: 25), the expression vector

further comprising a multiple cloning site for inserting,

in-frame with said first nucleic acid sequence, a second

nucleic acid sequence encoding a protein or polypeptide of

interest, wherein expression of the nucleic acid sequences

20   yields a fusion protein consisting essentially of the

        encoded peptide extension fused to the carboxyl-terminus of

        the protein or polypeptide of interest.

            65 - 92:   (cancelled)

            93.   (previously presented)   An expression vector,

        optimized for use in bacterial cells, for enhancing the

        solubility and proper folding of an expressed protein or

        polypeptide of interest, said protein or polypeptide having

        an amino-terminus and a carboxyl-terminus, comprising a

        first nucleic acid sequence encoding a peptide extension,

        which peptide extension is selected from the group

        consisting of: Peptide T7C (SEQ ID NO: 5), Peptide T7B (SEQ

        ID NO: 6), Peptide T7B1 (SEQ ID NO: 7), Peptide T7B2 (SEQ

10   ID NO: 8), Peptide T7B3 (SEQ ID NO: 9), Peptide T7B5 (SEQ

        ID NO: 11), Peptide T7B6 (SEQ ID NO: 12), Peptide T7B7 (SEQ

        ID NO: 13), Peptide T7B8 (SEQ ID NO: 14), Peptide T7B9 (SEQ

        ID NO: 15), Peptide T7B10 (SEQ ID NO: 16), Peptide T7B11

        (SEQ ID NO: 17), Peptide T7B12 (SEQ ID NO: 18), Peptide

        T7B13 (SEQ ID NO: 19), Peptide T7A1 (SEQ ID NO: 21),

        Peptide T7A2 (SEQ ID NO: 22), Peptide T7A3 (SEQ ID NO: 23),

Peptide T7A4 (SEQ ID NO: 24) and Peptide T7A5 (SEQ ID NO:

25), and further comprising a multiple cloning site for

inserting, in-frame with said first nucleic acid sequence,

20   a second nucleic acid sequence encoding the protein or

polypeptide of interest, wherein expression of the nucleic

acid sequences under physiological conditions yields a

fusion protein consisting essentially of the encoded

peptide extension fused to the carboxyl-terminus of the

protein or polypeptide of interest.

94.   cancelled

95.   (currently amended) The expression vector of

Claim ~~90~~ 64 wherein the ~~bacterial~~ cell__s__ ~~is~~ are selected

from the group consisting of E. coli, B. subtilis, and R.

eutrophus.

96.   (previously presented)   The expression vector of

Claim 95 wherein the cell is E. coli.

97.   (currently amended) The expression vector of

Claim 93 wherein the bacterial cell__s__ ~~is~~ are selected from

the group consisting of E. coli, B. subtilis, and R.

eutrophus.

98.   (currently amended) The expression vector of

Claim 97 wherein the cell ~~in~~ is E. coli.